

WHAT IS CLAIMED IS:

1. A map information device comprising:
  - a storage unit for map data recorded in a rectangular coordinate system;
  - 5 a route search unit for searching for a route based on information on two geographical points;
  - an area generator unit to set an area along the route between the two geographical points; and
  - a map search unit to search for and output the map data
  - 10 of the area,
  - wherein the area generator unit establishes the area by adding corrections to correct a width of the area based on latitude values of the route.
- 15 2. A map information device comprising:
  - a storage unit for map data;
  - a route search unit for searching for a route between
  - two geographical points;
  - an area generator unit to set an area along the route
  - 20 between the two geographical points;
  - an processor unit to simplify the figure of the area;
  - and
  - a map search unit to search for and output the
  - simplified area map data,

wherein the processor unit reduces a number of nodes consisting the route from the nodes included in the area generated by the area generator.

3. A map information device connected to a terminal,  
5 comprising: ✓

a route search unit for searching for a route based on information for two geographical points from said terminal;

an route area predictor for predicting enroute  
10 stopping points along the route;

an area generator unit to set an area along the route between the two geographical points; and

a map search unit to search for and output the map data of the area,

15 wherein the area generator unit establishes an expanded range for the area along the route in the vicinity of the enroute stopping points as the area.

4. A map information device according to claim 3, wherein said route area predictor establishes the enroute  
20 stopping points based on the predicted trip time schedule along the route.

5. A map information device according to claim 3, wherein the route area predictor establishes the enroute stopping points based on the remaining fuel value  
25 information received from the terminal.

6. A map information device according to claim 4, wherein the route area predictor establishes the enroute stopping points based on the specified rest break time period or a continuous driving time.

5 7. A map information device according to claim 3 comprising:

a processor unit to simplify the line figure of the route searched by the route search unit,

wherein the processor unit reduces a number of node  
10 consisting of the line figure of the route and the map area generator unit sets an area based on a simplified line figure.

8. A map information device according to claim 7: wherein the processor omits the nodes whose distance to next  
15 nodes are equal or less the predetermined value.

9. A map information device according to claim 4 comprising:

a processor unit to simplify the line figure of the route searched by the route search unit,

20 wherein the processor unit reduces a number of nodes included in the line figure of the route and the map area generator unit sets an area based on a simplified line figure.

10. A map information device according to claim 2 ,  
25 wherein the map search unit subdivides said area into

multiple area units, and determines map data that intersects or is included in the areas by subdivided area unit.

11. A map information device according to claim 7, wherein the map search unit subdivides said area into  
5 multiple area units, and determines map data that intersects or is included in the area by subdivided area units.

12. A map information device according to claim 2, with the map data based on rectangular coordinates, wherein the area generator unit establishes the area by adding  
10 corrections to correct a width of the area based on latitude values of the route.

13. A map information device according to claim 7, with the map data based on rectangular coordinates, wherein the area generator unit establishes the area by adding  
15 corrections to correct a width of the area based on latitude values of the route.